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the command.   The system then automatically translates the command into configuration

parameters for VPN gateways affected by the command.   The configuration parameters specify

how the VPNs handle communications between specific groups of addresses on the public data

network. (Column 3, lines 1-20).

In particular, at column 9, lines 39-48, Liu describes:

"...   A VPN gateway object 600 is created for each VPN gateway in the network. A VPN

gateway object comprises a number of parameters including an Internet Protoocl (IP) address of

the VPN gateway. A group object 610 is created for groups of network nodes on public network

100. In this embodiment, a group object includes an identifier for the VPN gateway associated

with the group and the net/mask pairs the group defines. A VPN object 620 comprises a number

of attributes including a list o f groups and a list o f remote clients included i n the underlying

VPN..."

At column 10, lines 26-56, Liu describes, in part:

"... Fig. 9 is a flow chart illustrating some of the operations performed by VPN

management station 160 in order to create a VPN... The system starts in state 900 and proceeds

to state 902. In state 902, the system gets the current VPN objet, which is the subject of the VPN

creation command. The system proceeds to state 904. In state 904, the system gets a list of

groups involved in the command, in other words the groups to be included in the VPN. The

system then proceeds to state 906. In state 906, the system gets a list of all VPN gateways

involved in the command by examining the appropriate fields in the VPN group objects. The

system then proceeds to state 908. In state 908, the system aggregates network/mask pairs for all

groups involved in the operations. Network mask pairs specify networks and address masks to

specify a group. .. In state 910, the system performs a collation operation to create configuration

information for the VPN gateways. This configuration information allows each VPN gateway to determine which communications are to be encrypted. The system then proceeds to state 912. "

Thus Liu maintains VPN data at the gateways to determine which IP addresses are involved in VPNs. The data is used to selectively encrypt or decrypt data received on the Public internet. *No mention is made in Liu of performing any type of routing determination*, rather Liu states, at column 7, lines 27-33 "... At decision box 22, the system determines whether or not the source and destination addresses for the data packet are both members of the same VPN group. This determination may be made with reference to lookup tables that are maintained by the VPN gateways or by referencing to other memory mechanisms. This state may be thought of as member filtering for data packets being transmitted between particular site and the VPN gateway which services it. If the source and destination addresses for the data packet are not both members of the same VPN group, then at state 230 the packet is forwarded to the Internet as ordinary Internet traffic from the site, as though the VPN gateway were not involved..."

<u>Armitage, U.S. 6,374,303</u>

Armitage describes an arrangement of field of label augmented, multi-protocol routing of data packets in a network using fixed length labels that are negotiated between adjacent label routing routers in a network. Routing labels are used in lieu of conventional address headers to route data packets through the network. (Abstract).

<u>No Motivation for the Modification Suggested by the Examiner</u>

The Examiner states, at page 3 of the office action "... Armitage teaches using the Next Hop Resolution protocol messages to dynamically establish a label switched path for the virtual private network (Figures 1, 2, 3, 4, 5, & 6, Abstract, column 7 line 55 to column 8 line 32)...

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Therefore it would be obvious to one with ordinary skill in the art at the time the invention was made to include the Next Hop Resolution Protocol messages of Armitage with the system of Liu, because it resolves a routing solution quicker..."

It is well established that "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is *some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.* "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab,* 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000)..." (MPEP §2143).

The Examiner's cited motivation that the combination would be obvious because ".. it resolves a routing solution quicker..." cannot be inferred from the references, since Liu neither addresses nor suggests any method or routing. Because Liu does not even mention routing, Applicants can see no reason why Liu would be motivated to implement routing, rather than simply forward the IP addresses to the internet as stated in the reference. The law specifically states that "...The mere fact that references <u>can</u> be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills,* 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)..." The law further states that "...Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d at 682, 16 USPQ2d at 1432.)..." Thus, because the prior art does not suggest the desirability of the modification, the rejection is improper and should be withdrawn.

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.The Examiner states further, at page 3, that "It would have been obvious to noe of ordinary skill in the art at the time of the invention was made to incorporate the label information and VPN identifier fields ... because it would hasten the speed in which a path through the network could be resolved..." Applicants submit that in reaching such a conclusion the Examiner is using impermissible hindsight based on the teachings of the present invention.

Accordingly, Applicants submit that the rejection under 35 U.S.C. §103 does not satisfy the prima facie burden of obviousness and should be withdrawn.

<u>Combination neither describes nor suggests claimed invention</u>

Even if an argument can be made that the references could be combined, the combination neither describes nor suggests the limitations of the claims. For example, claim 1 recites "... A method for supporting virtual private networks in a label switched communication system having an ingress device in communication with an egress device via a number of intermediate devices, the method comprising ... including label information and a virtual private network identifier in Next Hop Resolution Protocol messages, the virtual private network identifier identifying a virtual private network ... and ... using said Next Hop Resolution Protocol messages to dynamically establish a label switched path for the virtual private network..." In particular, Applicants can find no suggestion or description in Liu of "...including ... a virtual private network identifier ..." in "Next Hop Resolution Protocol..." messages. Rather, the only time that it appears that VPN IDs are transferred in Liu is in establishing databases at the VPN gateways.

Accordingly, for at least the reason that independent claims 1, 19, 36 and 53 all include the limitation of "...wherein the label switching logic including a label request and a virtual private network identifier in Next Hop Resolution Protocol request messages...", all the

independent claims are patentably distinct over the combination of references cited by the

Examiner, and therefore the rejection should be withdrawn. Dependent claims 2-18, 20-35, 37-

52 and 54-60 serve to add further patentable limitations to their parent independent claims but

are patentably distinct for at least the reasons put forth above with regard to those claims.

Claims 15 and 18 were rejected under 35 U.S.C. §103 as being unpatentable over Liu in

view of Armitage and further in view of Halpern. Claims 19, 20, 36 and 37 were rejected under

37 U.S.C. §103 as being unpatentable over Halpern in view of Liu. Claims 21 through 35 and

38-52 are rejected to under 35 U.S.C. §103 as being unpatentable over Halpern in view of Liu,

and further in view of Armitage. Claims 56 through 60 were rejected to under 35 U.S.C. §103 as

being unpatentable over Armitage in view of Liu.

Halpern, U.S. Patent 6,438,100

Halpern describes a method an apparatus that includes processing that detects when

connectivity to an Route Server Instance (RSI) host that is supporting an active RSI has failed

and provides a replacement RSI host from a redundancy set. In particular, Halpern describes, at

column 10, lines 34-37 "... Within a public Internet realm, they use iBGP4 ... and NHRP and an

IGP. An IBGP attribute is used to distribute the IP address of the egress edge forwarder for

external destinations..."

With regard to the combination of Halpern with Liu and Armitage, the Examiner states

that it would be obvious to combine Halpern with Liu and Armitage because it would offer

another method to establish a path through the network. However, no motivation can be found

for providing an additional method of establishing a path through the network, and it is unclear to

the Applicant how Liu, which does not describe routing in any instance, would benefit from such

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an addition. Accordingly, since no motivation can be found, the rejection should be withdrawn.

Even if the motivation can be found, Halpern does not overcome the inadequacies of the

combination of Liu and Armitage described above, and therefore the rejection should be

withdrawn since the combination neither describes nor suggests the claimed invention.

Applicants have made a diligent effort to place the claims in condition for allowance.

However, should there remain unresolved issues that require adverse action, it is respectfully

requested that the Examiner telephone Mary Steubing, Applicants' Attorney at so that such

issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now

considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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Date

Lindsay McGuinness, Reg. No. 38,549
Attorney/Agent for Applicant(s)
Steubing McGuinness & Manaras LLP
30 Nagog Park Drive
Acton, MA 01720
(978) 264-6664
(978) 264-9119 fax

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